

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5773	347/22,29,30,31,34,36,40,41,42,43,47,89.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 21:15
L2	2875	L1 and (@ad<"20010517")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 21:15
L3	351	(nozzle printhead head) with cap\$4 with (sponge absorb\$4) with (suck\$3 suction)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 21:16
L4	48	2 and 3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 21:17
S1	18	"4549188"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/20 22:11
S2	9	"3776461"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/20 22:11
S3	6	("3776461").URPN.	USPAT	OR	ON	2007/01/20 22:30
S4	8	("3776461"   "5381169").PN. OR ("5815177").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/20 22:34
S5	6	(spong\$3 absorb\$4) with (capillar\$5 suction suck\$4) with ink with nozzle adj3 (plate area)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/20 23:35
S6	618	(spong\$3 absorb\$4) with (orifice nozzle) adj3 (plate area layer)	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:18
S7	511	ink with (nozzle orifice) adj4 (plate layer) with (suction capillar\$5 suck\$3 draw\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/20 23:56
S8	41	S6 and S7	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:01
S9	4	(absorb\$4 suction\$3) with (peripher\$4 vicinity around circl\$3) with (nozzle orifice) with excess\$5 with ink	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:07
S10	40	(absorb\$4 suction\$3) with (peripher\$4 vicinity around circl\$3 ring\$3) with (nozzle orifice) with concav\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:15

## EAST Search History

S11	99686	(absorb\$4 capillary suction\$3) same (nozzle orifice)	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:19
S13	84184	S11 and "13"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:14
S14	5608	(absorb\$4 suction\$3) with (peripher\$4 vicinity around circl\$3 ring\$3) with (nozzle orifice)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:15
S15	4880	S13 and S14	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:16
S16	15298	(recess\$2 concav\$5 doughnut groove well) same nozzle adj4 (opening hole diameter)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:18
S17	463	S15 and S16	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:18
S18	6	S6 and S17	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 00:19
S19	742	(absorb\$4 suction suck\$3 capillar\$4 wip\$3) with (ring\$3 around surround\$3 abut\$4 peripher\$5 vicinity) with nozzle adj3 (open\$4 plate hole aperture)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/21 13:42
S20	67844	"347"/\$.cccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/21 13:42
S21	1515	nguyen adj thinh	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/21 13:43
S22	180	S19 and (S20 S21)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/21 13:43
S23	4	("6474566").URPN.	USPAT	OR	ON	2007/01/21 16:29
S24	8	("5152456"   "5437255"   "5489928"   "5563640"   "5786832"   "5798775"   "5829411"   "5840062").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/21 16:36
S25	2	"6991315"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 01:48
S26	19	("5798775").URPN.	USPAT	OR	ON	2007/01/22 07:10

## EAST Search History

S27	2	printbar with nozzle with cap\$4 with wiper	USPAT	OR	ON	2007/01/22 07:11
S28	33	(fullwidth pagewid\$3 elongated) near5 (wip\$3 scrap\$4 blade) with (wip\$3 clean\$3) with ink	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 07:39
S29	27	(fullwidth pagewid\$3 elongated) near5 print\$4 with (wip\$3 scrap\$4 blade) with ink	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 08:36
S30	12	(fullwidth pagewid\$3 elongated) near5 print\$4 with wiper	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 07:44
S31	55	(fullwidth pagewid\$3 elongated) near5 print\$4 same wiper	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 07:44
S32	49	(fullwidth pagewid\$3 elongated) near5 print\$4 same(wip\$3 scrap\$4 blade) with ink	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 07:44
S33	2	"6991315"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 08:05
S34	0	("6991315").URPN.	USPAT	OR	ON	2007/01/22 08:05
S35	4	("6257699"   "6277529"   "6471352"   "6604821").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 08:05
S36	10	("5790146").URPN.	USPAT	OR	ON	2007/01/22 08:30
S37	19	cartridge with compartments with (suppl\$4 outlet inlet) with ink and (maintenance service)	USPAT	OR	ON	2007/01/22 08:31
S38	7	(fullwidth pagewid\$3 line) near5 print\$4 same cartridge with (wip\$3 scrap\$4 blade) with ink	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 08:37
S39	272	(fullwidth pagewid\$3) near5 print\$4 same cartridge	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 08:38
S40	87	xerox and S39	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:29

## EAST Search History

S41	9	("3737233"   "3754822"   "4207578"   "4551014"   "4801981"   "4992805"   "5051761"   "5124728"   "5135317"). PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 08:51
S42	174	ink with (maintenan\$2 servic\$3) with station with cap\$4 with wip\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 08:52
S43	4	S39 and S42	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 08:57
S44	541	347/42.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 08:57
S45	41	nguyen adj thinh and S44	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 09:31
S46	1	pagewidth same cartridge with (different multiple) with (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:19
S47	7	pagewidth same cartridge same(different multiple) with (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:20
S48	7	pagewidth same cartridge same (different multiple) with (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:21
S49	246	pagewidth and cartridge same (different multiple) with (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:21
S50	8	pagewidth same cartridge same (different multiple) same (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:21
S51	7	pagewidth same cartridge same (different multiple) adj5 (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:28
S52	10	(pagewid\$3 fullwidth printbar (full adj line)) same cartridge same (different multiple) adj5 (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:40
S53	318	(pagewid\$3 fullwidth printbar (full adj line)) and cartridge same (different multiple) adj5 (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:26

## EAST Search History

S54	0	S42 and S53	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:26
S55	13	S44 and S53	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:26
S56	113	pagewidth same (different multiple) adj5 (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:28
S57	51	xerox and S56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:29
S58	96	nguyen adj tinh and xerox	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 09:46
S59	13	(pagewid\$3 fullwidth printbar (full adj (width line))) same cartridge same (different multiple) adj5 (compartment color)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:42
S60	35	"5221397"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/22 09:42
S61	31	nguyen adj tinh and hackleman	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 09:46
S62	21	("3852563"   "4411540"   "4689494"   "4695853"   "4716421"   "4719477"   "4803500"   "4853718"   "4872027"   "4899180"   "4902244"   "4930915"   "4947192"   "4963897"   "5033887"   "5049904"   "5103246"   "5144336"   "5235351"   "5289210"   "5363134"). PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 09:48
S63	8	("5107276"   "5343227"   "5410340"   "5440332"   "5469199"   "5625390"   "5742305"   "5751311").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 09:48
S64	74	("5469199").URPN.	USPAT	OR	ON	2007/01/22 10:00
S65	18	"6460984"	USPAT	OR	ON	2007/01/22 10:00
S66	40	("5587730").URPN.	USPAT	OR	ON	2007/01/22 10:07
S67	8	("5751311").URPN.	USPAT	OR	ON	2007/01/22 10:13
S68	4	("4833491"   "5057854"   "5179418"   "5398053").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/22 10:32

## EAST Search History

S69	66	("4833491").URPN.	USPAT	OR	ON	2007/01/22 10:33
S70	174	ink with (maintenan\$2 servic\$3) with station with cap\$4 with wip\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:14
S71	232	nozzle adj4 cap\$4 with absorb\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/02 08:16
S72	13364	maintenance with print\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/02 08:09
S73	34	S71 and S72	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/02 08:09
S74	0	nozzle with cap\$4 with absorb\$4 with (swing\$3 pivot\$4 rotat\$3) same open	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/03/27 21:08
S75	1	nozzle with cap\$4 with absorb\$4 with (swing\$3 pivot\$4 rotat\$3) same print\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/02 08:25
S76	60	nozzle with cap\$4 with absorb\$4 with inside	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/02 08:26
S77	420	(nozzle printhead head) same cap\$4 with (sponge absorb\$4) with (suck\$3 suction)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/03 16:40
S78	1114	347/29,31.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/03 16:41
S79	74	S77 and S78	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/02/03 16:41
S80	6068	347/22,29,30,31-34,36,40,41,42,43, 47,89.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/27 21:04
S81	421	(maintenan\$2 servic\$3) with station with cap\$4 with wip\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/27 21:07

## EAST Search History

S82	287	S80 and S81	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/27 21:07
S83	144	cap\$4 with absorb\$4 with (swing\$3 pivot\$4 rotat\$3) and open with (cell\$5 foam absorb\$4 spong\$3 neopren\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 13:23
S84	1303	cap\$4 with (spray\$3 pump\$4 squirt\$3) with (clean\$4 wash\$4) with (fluid\$3 liquid\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/03/27 21:12
S85	3	S82 and (S83 S84) and (@ad<"20010517")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/03/27 21:14
S86	3152	S80 and (@ad<"20010517")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 21:15
S87	171	S82 and (@ad<"20010517")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/03/27 21:14
S88	746	(maintenan\$2 servic\$3) with (mechani\$3 station assembl\$3) with nozzle with cap\$4	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:16
S89	292	(spong\$3 absorb\$4) with (orifice nozzle) with wip\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:18
S90	217192	(absorb\$4 capillary suction\$3) same cap\$4	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:19
S91	44	S88 and S89 and S90	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:19
S92	5773	347/22,29,30,31,34,36,40,41,42,43, 47,89.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/31 13:20
S93	446	(nozzle printhead head) same cap\$4 with (sponge absorb\$4) with (suck\$3 suction)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 21:16
S94	82086	cap\$4 with absorb\$4 with (cell\$5 foam absorb\$4 spong\$3 neopren\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 13:24

## EAST Search History

S95	42	S91 and (S93 S94)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 13:24
S96	24	S92 and S95	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/31 13:25